

MONARDA STIPITATOGLANDULOSA,
A NEW SPECIES FROM OKLAHOMA

U. T. WATERFALL

While collecting in southeastern Oklahoma in late June, 1966, the author noted a rather dwarf, erect, colonial member of the Labiateae on a mountain top, or ridge top, in Beaver Bend State Park, north of Broken Bow in McCurtain County. It was past anthesis, and appeared to be either a *Monarda*, or a *Pycnanthemum*. He had seen it before, but not in flowering condition, so he dug it up and transplanted it at his home in Stillwater.

In the spring of 1970, after having spread by rhizomes, the colony flowered abundantly. The material seemed different enough from its nearest relative, *Monarda fistulosa* var. *mollis*, or from any other taxa in the genus as described by McClintock and Epling (1942), to warrant its description.

Its principal differentiating characteristics are: (1) its stipitate-glandular calyx teeth, the glands large, capitate, on stipes of varying length; in *Monarda fistulosa* var. *mollis* the calyx teeth vary from eglandular to sessile-glandular; (2) it has minute stipitate-glandular hairs on the external surface of the calyx tube; in *M. fistulosa* var. *mollis* the calyx tube varies from nearly glabrous to abundantly vestite with small, spreading or curled hairs, sometimes with sessile glands intermixed; (3) the vestiture of the bracts may also include short, stipitate-glandular hairs, as well as long multicellular hairs; (4) the orifice of the calyx tube has horizontal, inwardly directed stiff hairs, or inwardly ascending hairs, not long enough to close the orifice in post-anthesis calyces; in *M. fistulosa* var. *mollis* the abundant stiff hairs are erect to strongly incurved-ascending, and there is often an outer, outwardly reflexed circle of hairs; (5) the corolla is white; in our *M. fistulosa* var. *mollis* it is lavender, sometimes a lighter color.

The lower lip of the corolla is down-curved, with an abrupt, upward-turned apical tip 3-4 mm long; the style extends 2-3 mm beyond the tip of the upper lip; the fruit is oblong-ovate to oblong, 1.3-1.8 mm long, light brown in color.

The original collection, from shallow, stony soil, was of rather dwarf plants, as compared with *M. fistulosa* var. *mollis*, the plants being 20-25 cm tall. The garden-raised ones were 30-40 cm tall, growing larger under better conditions, but still much shorter than *M. fistulosa* var. *mollis* native in the same area. The plants began to flower May 18th, about 3-4 weeks before *M. fistulosa* var. *mollis* begins to flower in the same vicinity.

M. stipitatoglandulosa Waterfall, *sp. nov.* Planta erecta, rhizomotosa, nana, 20-40 cm alta; caulibus minute curvipilis; foliis lanceolatis, vel angustolanceolatis, paucidentatis; petiolis 2-15 mm longis; bracteis stipitatoglandulosis et trichomatibus longis; calycibus tubularibus minute stipitatoglandulosis; corollis plus minusve falcatis, albis, 25-30 mm longis; labellis infernis ca 12-15 mm longis; labellis supernis 12-14 mm longis; stylis exsertis 2-3 mm; fructibus oblongis-ovatis vel oblongis, 1.3-1.8 mm longis, pallide brunneis.

Holotypus: *Waterfall* 17478, raised in garden from plants collected in an opening on a wooded mountain top, 7 miles north and 2.7 east of Broken Bow, McCurtain County, May 22, 1970 (OKLA). Isotypes will be distributed.

A second collection referred to *M. stipitatoglandulosa* is *Harry Love* 159; rocky, oak-covered hillside, 1 mile south of Cloudy, Pushmataha County, June 19, 1966 (OKLA).

The finding of this species in McCurtain and Pushmataha counties is reminiscent of two other similarly endemic species, *Streptanthus squamiformis* Goodman (1956), also described from Beaver Bend State Park, and the unique *Carex latebracteata* Waterfall (1954), described from a few miles north of the park, but also found in the park, and later discovered in adjacent LeFlore County (Means, 1969).

DEPARTMENT OF BOTANY AND PLANT PATHOLOGY
OKLAHOMA STATE UNIVERSITY
STILLWATER, OKLAHOMA 74074

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